

WHAT IS CLAIMED IS:

1. A design support system, comprising:

5 a holding device which divides a history of design work for creating a shape model for each part of the shape model and holds a plurality of design work histories as unit work history data;

a selection device which fetches at least two unit work history data selected from the plurality of unit work history data held by the holding device; and

10 a combining device which combines the at least two selected unit work history data and outputs design work data for creating a combined shape model which is formed by joining part shape models corresponding to the respective unit work history data.

2. A design support system which outputs work data for creating a shape model of a design target in order to create the shape model of the design target conforming to a standard shape, comprising:

20 a holding device which holds a plurality of unit work history data which are obtained by dividing a history of a design work performed with reference to a first standard shape for each design work history corresponding to a shape model of a predetermined portion;

a receiving device which accepts designation of data about a second standard shape;

25 a selecting device which fetches multiple unit work history data selected from the multiple unit work history data held by the holding device; and

an output device which combines each of the fetched unit work history data, reproduces design work with reference to the

designated second standard shape for the design works performed with reference to the first standard shape among the design works contained in the unit work history data, and outputs work data corresponding to a combined shape model conforming to the second  
5 standard shape.

3. The design support system according to claim 2, further comprising:

a device which computes at least one technical characteristic value of a combined shape model which is created from the output work data.

4. The design support system according to claim 3, wherein:

the holding device accumulates technical conditions, which should be met by a part shape model to be created according to each unit work history data, in association with each unit work history data; and further comprising:

a device which compares the computed technical characteristic value with the technical conditions related to unit work history  
20 data which is the origin of the work data.

5. The design support system according to claim 2, further comprising:

a device which receives designation of data about a third standard  
25 shape; wherein:

the work data is converted by reproducing a design work with reference to the designated third standard shape for work included in the work contained in the output work data and performed with reference to the second standard shape, and conversion work data

corresponding to a shape model conforming to the third standard shape is output.

6. The design support system according to claim 1, further comprising:

a device which analyzes a history of design work and extracts input work carried out by a person in charge of work when unit historical data is created;

a device which shows the extracted input work to the person in charge of work to receive input of design support information; and

a device which records the design support information in a history of the design work and divides into unit historical data when the design support information is input so to show when the design support information is reused.

7. A design support system which holds a series of design work histories to reuse as work history data and creates a shape based on the work history data, comprising:

a device which analyzes the work history data to extract input work carried out by a person in charge of work;

a device which shows the extracted input work to the person in charge of work to receive input of design support information; and

a device which records the design support information in the work history data when the design support information is input so to show when the design support information is reused.

8. The design support system according to claim 7, further comprising:

a device which generates unit work history data by dividing the

work history data into predetermined work units for each design target.

9. A design support system, comprising:

5 a device which accumulates unit work history data which is formed by dividing a history of past design work into work units determined for each design target and contains design support information related to input work among the design work;

10 a device which selectively shows the unit work history upon receiving designation of the design target;

10046715-011702 a device which creates a shape by sequentially reproducing the selected unit work history; and

a device which provides design support information related to input work when the input work is demanded while the unit work history is being reproduced.

10. The design support system according to claim 9, further comprising:

20 a device which judges whether the work history to be reproduced agrees with predetermined guidance display conditions while the unit work history is being reproduced; and

a device which implements a guidance display determined in connection with the guide display conditions if the work history agrees with the guidance display conditions.

25 11. A design support system, comprising:

a device which accumulates unit work history data which is formed by dividing a history of past design work into work units determined for each design target and contains design support information

related to an input work among the design work;

a first display device which shows a shape of a design target obtained by sequentially reproducing a history of the design work with reference to the unit work history data; and

5 a second display device which shows design support information contained in the unit work history data by reproducing a history of a design work prior to the reproduction at the first display device.

10 12. A design support method using a computer, wherein:

10046715-011702 a series of design work histories is held in multiple quantities as work history data in a database in order to create a part shape model;

at least two selected work history data are fetched from the held multiple work history data according to an instruction input to a processor; and

design work data for creating a one-piece shape model by combining the at least two fetched work history data and connecting part shape models corresponding to the respective work history data is output.

20 13. A design support method which uses a computer to create a shape model of a design target conforming to a desired standard shape according to input to its processor and outputs work data for creating the shape model of the design target, comprising the steps of:

25 holding a plurality of histories of design work performed in the past with reference to the respective standard shapes in a database as work history data;

accepting designation of data about a second standard shape,

which is a desired standard shape, according to an instruction input to the processor;

fetching the selected multiple work history data from the multiple work history data held in the database; and

5 combining respective pieces of the fetched work history data, reproducing design work with reference to the designated second standard shape for the design work performed in the past with reference to the respective standard shapes among the design work contained in the work history data, and outputting work data corresponding to a combined shape model conforming to the second standard shape.

10 14. A design support method which holds a series of design work histories as work history data in order for reuse and generates a shape by a computer according to the work history data according to an instruction input to a processor, comprising the steps of:

analyzing the work history data upon input to the processor to extract the input work performed by a person in charge of work; and

20 showing the extracted input work to the person in charge of work to receive input of design support information and, when the design support information is input, recording the design support information in the work history data so to show it at the time of reuse.

25 15. A design support method, comprising the steps of:

accumulating, using a computer, unit work history data which is formed by dividing a history of past design work into work units determined for each design target and contains design support

information related to input work among the design work;

showing the unit work history selectively upon receiving designation of a design target by the computer;

creating a shape by sequentially reproducing the selected unit  
5 work history; and

providing the design support information related to input work when the input work is demanded while the unit work history is being reproduced.

10 16. The design support method according to claim 15, wherein it is judged whether the work history to be reproduced conforms to predetermined guidance display conditions while the unit work history data is being reproduced by the computer and, if it conforms to the guidance display conditions, a guidance display determined in connection with the guide display conditions is performed.

15 17. A recording medium storing a design support program and being computer-readable, the design support program comprising:

20 a module holding a series of design work histories as a plurality of work history data for creation of a part shape model;

a module fetching at least two selected work history data from the held multiple work history data; and

25 a module outputting design work data for creating a one-piece shape model by combining the at least two fetched work history data and connecting part shape models corresponding to the respective work history data.

18. A recording medium storing a design support program and being computer-readable, the design support program comprising:

a module outputting work data for creating a shape model of a design target in order to create the shape model of the design target conforming to a desired standard shape;

a module holding a history of design work performed with reference to a first standard shape as a plurality of work history data;

a module receiving designation of data about a second standard shape which is a desired standard shape;

a module fetching the selected multiple work history data from the held multiple work history data; and

a module combining each of the fetched work history data, reproducing design work with reference to the designated second standard shape for the design works performed with reference to the first standard shape among the design works contained in the work history data, and outputting work data corresponding to a one-piece shape model conforming to the second standard shape.

19. A recording medium storing a design support program and being computer-readable, the design support program comprising:

a module holding a series of design work histories to reuse as work history data;

a module analyzing the work history data to extract input work performed by a person in charge of work;

a module showing the extracted input work to the person in charge of work to receive input of design support information; and

a module recording the design support information in the work history data when the design support information is input in order to show it when reused.

20. A recording medium storing a design support program and being

computer-readable, the design support program comprising:

a module accumulating unit work history data which is formed by dividing a history of past design work into work units determined for each design target and contains design support information

5 related to input work among the design work;

a module selectively showing the unit work history upon receiving designation of the design target;

a module creating a shape by sequentially reproducing the selected unit work history; and

10 a module providing design support information related to an input work when the input work is demanded while the unit work history is being reproduced.

21. The recording medium being computer-readable according to claim 20, wherein:

the design support program stored in the recording medium further includes a module judging whether the work history to be reproduced agrees with predetermined guidance display conditions while the unit work history is being reproduced and, if the work history agrees  
20 with the guidance display conditions, implements a guidance display determined in connection with the conditions.